

What Is Claimed Is:

1. An ignition coil (10) for a gasoline engine having a coil core (12), in which a primary magnetic field ( $H_P$ ) is inducible via a current-carrying ( $I_P$ ), essentially coil-shaped primary winding (14), and an essentially coil-shaped secondary winding (16), in which an energy field, which controls at least one spark plug (18), is able to be built up due to the primary magnetic field ( $H_P$ ), a premagnetization device for forming a premagnetization field ( $H_V$ ) opposite the primary magnetic field ( $H_P$ ) being effective at the coil core (12),  
wherein the premagnetization device has a current-carrying ( $I_V$ ), essentially coil-shaped premagnetization winding (20).
2. The ignition coil as recited in Claim 1,  
wherein the primary winding (14) and the premagnetization winding (20) are wound around the coil core (12) essentially parallel to one another.
3. The ignition coil as recited in Claim 1 or 2,  
wherein the current flow directions of the electric current ( $I_P$  and  $I_V$ ) in adjoining turns of the primary winding (14) and the premagnetization winding (20) are oriented in an anti-parallel manner.
4. The ignition coil as recited in one of Claims 1 through 3,  
wherein the current supply connections (22, 24) of the primary winding (14) and the premagnetization winding (20) are designed to be separate from another.
5. The ignition coil as recited in one of Claims 1 through 3,  
wherein the primary winding (14) and the premagnetization winding (20) have a common current supply connection (26).
6. The ignition coil as recited in Claim 5,  
wherein a series resistor ( $R_V$ ) is connected between the current supply connection (26) and the premagnetization winding (20).
7. The ignition coil as recited in one of Claims 4 through 6,  
wherein an end of the premagnetization winding (20) opposite the current supply connection (22, 24; 26) is connected to a ground (GND).

8. The ignition coil as recited in one of Claims 1 through 7,  
wherein the primary winding (14) and the premagnetization winding (20) are wound  
up on the coil core (12) as a single multi-layer winding, the multi-layer winding being  
cut at least at one point for separating the primary winding (14) and the  
premagnetization winding (20) and the free ends being contacted for connecting  
purposes.